

Title (en)

A combined radiation source holder and beam collimator for level measurement systems

Title (de)

Ein kombinierter Strahlungsquellenhalter und Strahlkollimator für Füllstandmesssysteme

Title (fr)

Un support de source de rayonnement avec collimateur de faisceau pour des systèmes de mesure de niveau

Publication

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Application

EP 10180951 A 19991012

Priority

- EP 99949201 A 19991012
- GB 9822301 A 19981014

Abstract (en)

A combined radiation source holder and beam collimator in which the source holder comprises a rod having a plurality of holes adapted to receive radiation sources and said collimator comprises a tube made of radiation absorbent material and having transmission holes in it, said rod and tube being arranged such that in use each radiation source is aligned with at least one transmission hole aligned to provide a path along which radiation from the source traverses the thickness of the tube to produce a collimated beam of radiation which is projected laterally relative to the rod and tube. The source holder and collimator is suitable for use in a density profiler for measuring a density profile of a medium including at least two liquid and gaseous phases includes an axially distributed source array providing at least 10 collimated ionising radiation beams; an axially distributed radiation detector array, each detector associated in use with one of the beams and producing an output signal in response to incident radiation; and an analyser for the detector output signals to determine the density of the medium traversed by the beams of radiation.

IPC 8 full level

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B01D 17/047 (2013.01 - EP US); **G01F 23/288** (2013.01 - EP US); **G01F 23/2885** (2013.01 - EP US)

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